

**REMARKS****Summary of the Office Action**

Claims 1, 11, 12, 15, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,835,177 to *Dohjo, et al.* (hereafter “*Dohjo*”).

Claims 1-6, 8, 11-13, 15, and 16 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,771,348 to *Oh, et al.* (hereafter “*Oh*”).

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dohjo* in view of U.S. Patent No. 6,281,959, to *Kim et al.* (hereafter “*Kim959*”).

Claims 1-4, 8, 9, 11, 15, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application No. 2001/0030718 A1 to *Yoo et al.* (hereafter “*Yoo*”) in view of U.S. Patent No. 5,748,179, to *Ito et al.* (hereafter “*Ito*”).

Claims 5-7 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yoo* in view of *Ito*, and further in view of U.S. Patent No. 6,100,954, to *Kim et al.* (hereafter “*Kim954*”).

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yoo* in view of *Ito*, and further in view of U.S. Patent No. 6,001,539, to *Lyu et al.* (hereafter “*Lyu*”).

Claims 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Oh* in view of *Kim954*.

Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Oh* in view of *Yoo* and *Lyu*.

Claims 13 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dohjo* in view of *Kim954*.

**Summary of the Response to the Office Action**

Applicants amend independent claims 1, 4, 11, and 16, and add new dependent claim 17.

Accordingly, claims 1-17 are pending for further consideration.

**All Subject Matter Complies With 35 U.S.C. § 102(b)**

Claims 1, 11, 12, 15, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Dohjo*. This rejection is respectfully traversed.

Applicants respectfully submit that the Office Action has not established that *Dohjo* anticipates each and every feature of Applicants' claimed invention and that all rejections under 35 U.S.C. § 102(b) should be withdrawn. Namely, Applicants contend that newly amended independent claims 1, 11, and 16 recite the feature of "the first side contact is positioned in a central portion of the data pad." Applicants respectfully submit that at least these features are not disclosed or taught by *Dohjo*.

*Dohjo* discloses an array substrate with bus lines for use in a flat panel display device including LCD devices and the manufacturer thereof. See *Dohjo* at col. 1, lines 6-9. The Office Action alleges that *Dohjo* discloses all the features of the present invention. However, *Dohjo* fails to teach or suggest at least the above-mentioned features where a contact or contact hole is positioned in a central portion of the data pad as recited in newly amended independent claims 1, 11, and 16. Accordingly, Applicants respectfully assert that the rejection under 35 U.S.C. § 102(b) should be withdrawn because *Dohjo* does not teach or suggest each feature of newly amended independent claims 1, 11, and 16.

Additionally, Applicants respectfully submit that dependent claims 12 and 15 are also allowable insofar as they recite the patentable combinations of features recited in claim 11, as well as reciting additional features that further distinguish over the applied references of record.

**All Subject Matter Complies With 35 U.S.C. § 102(e)**

Claims 1-6, 8, 11-13, 15 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Oh*. This rejection is respectfully traversed.

Applicants respectfully submit that the Office Action has not established that *Oh* anticipates each and every feature of Applicants' claimed invention and that all rejections under 35 U.S.C. § 102(e) should be withdrawn. Namely, Applicants contend that newly amended independent claims 1 and 11 recite the features of "the first side contact is positioned in a central portion of the data pad." Applicants respectfully submit that at least these features are not disclosed or taught by *Oh*.

*Oh* provides a displaying substrate capable of enhancing connection characteristics between a pad portion and a circuit substrate, and reducing driving failure. See *Oh* at col. 3, lines 29-32. However, *Oh* fails to teach or suggest at least the above features of independent claims 1, 4, and 11. The Office Action alleges that *Oh* discloses all the features of the present invention. However, *Oh* fails to teach or suggest at least the above-mentioned features where a contact or contact hole is positioned in a central portion of the data pad as recited in newly amended independent claims 1, 4, and 11.

Accordingly, Applicants respectfully assert that the rejection under 35 U.S.C. § 102(e) should be withdrawn because *Oh* does not teach or suggest each feature of newly amended independent claims 1, 4, and 11. Additionally, Applicants respectfully submit that dependent claims 2-3, 5-6, 8, 12-13 and 15 are also allowable insofar as they recite the patentable combinations of features recited in claims 1, 4, and 11, as well as reciting additional features that further distinguish over the applied references of record.

**All Subject Matter Complies With 35 U.S.C. § 103(a)**

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dohjo* in view of *Kim959*. This rejection is respectfully traversed.

*Kim959* is directed to a connecting part of an outer circuit in a liquid crystal display panel and fabricating method thereof. As shown in Figure 11b, the third contact hole H3 above the first wire 105 of the contact pad 101 is not accompanied by contact holes on both sides having different areas. See *Kim959* at col 6, lines 9-23. *Kim959* does not overcome the deficiencies of *Dohjo* as described above. Namely, *Kim959* does not teach or suggest the features of “at least one second side contact with a second area formed in each data pad, the data line being side-contacted with the conductive material in the second side contact, wherein the first side contact is positioned in a central portion of the data pad and a first contact area contacted with the conductive material is larger than a second area contacted with the conductive material” as claimed in newly amended independent claim 1. Specifically, *Kim959* fails to teach or suggest that “a first contact area contacted with the conductive material is larger than a second area contacted with the conductive material,” as recited in claim 1. Accordingly, claim 3, which depends from independent claim 1, is allowable for the same reasons above-mentioned.

In addition, claims 1-4, 8, 9, 11, 15, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yoo* in view of *Ito*, claims 5-7 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yoo* in view of *Ito*, and further in view of *Kim954*, claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yoo* in view of *Ito*, and further in view of *Lyu*, claims 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Oh* in view of *Kim954*, claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Oh* in view of *Yoo* and *Lyu*, and claims 13 and 14 stand

rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dohjo* in view of *Kim954*. This rejection is respectfully traversed.

*Yoo* is directed to a data pad electrode 124 and a data pad 120 that are electrically connected together via a data pad contact hole 122. The data pad contact hole 122 preferably includes a plurality of holes formed through the data pad 120, such that the contact resistance between the data pad 120 and the data pad electrode 124 is reduced. See page 3, paragraph [0044], FIGS. 6D of *Yoo*. However, *Yoo* is completely silent about the feature of “a first contact area contacted with the conductive material is larger than a second area contacted with the conductive material.”

*Ito* is directed to an input wire Td to a driving IC including first conductive film g1, and second and third conductive films d2 and d3, respectively. In addition, *Ito* teaches that input wire Td to the driving IC connection has a turn-on test pad (item, TEST, col. 6, line 59 to col. 7, line 4, Figs. 3 and 4C). Applicants respectively submit that *Ito* teaches a test area is contacted with an output of a flexible board, however, such test area is not covered with the conductive material. Accordingly, Applicants respectfully assert that *Ito* does not overcome the deficiencies of *Yoo* as described above. Specifically, neither *Yoo* nor *Ito* teaches or suggests that “a first contact area contacted with the conductive material is larger than a second area contacted with the conductive material,” as recited by newly amended independent claims 1, 4, 11, and 16.

Furthermore, in light of argument presented above, *Ito*, *Kim954*, and *Lyu*, whether taken singly or combined, do not cure the deficiency of *Yoo*. Accordingly, Applicants respectfully assert that the rejection under 35 U.S.C. § 103(a) should be withdrawn, since none of cited references, *Dohjo*, *Kim959*, *Yoo*, *Ito*, *Kim954*, *Lyu*, and *Oh*, whether taken singly or combined, teaches at least the features of newly amended independent claims 1, 4, 11, and 16. Moreover,

claims 2-3, 5-9, 12-15 which respectfully depends from independent claims 1, 4, 11, and 16 are allowable for the same reasons above-mentioned and for the additional features each dependent claim recite.

## **CONCLUSION**

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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